

Application No.: 10/579,733  
Reply to Office Action dated March 17, 2009

Attorney Docket No. 4035-0180PUS1  
Art Unit 2416  
Page 11

**AMENDMENTS TO THE DRAWINGS**

The attached sheet of drawings includes changes to Fig.2. This sheet, which includes only Fig. 2, replaces the original sheet including that same Figure.

DESCRIBE CHANGE: Numerals 10 and 18 have been added to Fig. 1.

Attachment: Replacement Sheet

**REMARKS**

Applicants thank the Examiner for the very thorough consideration given the present application.

Claims 1-6 are now present in this application. Claims 1, 5 and 6 are independent.

By this Amendment, the title is amended, claims 1-4 are amended; and claims 5 and 6 are added. Claim 1 was amended to correct a typographical error and to better correspond with U.S. claim drafting practice, as well as claims 2-4. No new matter is involved.

Reconsideration of this application, as amended, is respectfully requested.

**Improper Acknowledgement of Priority Under 35 U.S.C. § 119**

Applicants note that the Office Action Summary (Form PTOL-326) acknowledging a claim for foreign priority under 35 U.S.C. § 119, and receipt of the certified priority document. Unfortunately, Applicants have not made such a claim for priority. This Application is a national Stage Application filed under 35 USC § 371 of PCT/JP03/14724, which was filed on November 19, 2003.

Applicants respectfully submit that, on Form PTOL-326, boxes 12, 12a and 12a3 should have been checked instead of the boxes that were actually checked, and request that this issue be addressed and corrected in the next Office Action.

**Information Disclosure Citation**

Applicants thank the Examiner for considering the references supplied with the

Information Disclosure Statements filed on May 18, 2006 and January 4, 2009, and for providing Applicants with initialed copies of the forms PTO/SB/08 filed therewith.

**Objection to the Title of the Invention**

The title is objected to for not being descriptive. In order to obviate this objection, Applicants have amended the Title of the Invention in order to better reflect the subject matter claimed.

Reconsideration and withdrawal of this objection are respectfully requested.

**Objection to the Drawing**

The drawing is objected to because Fig. 2 does not include label numerals 10 and 18. In order to obviate this objection, Applicants are filing a replacement drawing sheet of Fig. 2 with numerals 10 and 18 added thereto.

Reconsideration and withdrawal of this objection are respectfully requested.

**Claim Objections**

The Examiner has objected to claim 1 because of a mis-spelled word ("anable") and because the word "therebetween" is a typographical error.

In order to overcome this objection, Applicants have amended claim 1 by changing "anable" to read --enable--. However, Applicants see nothing wrong with the spelling of the word "therebetween," and ask for an explanation of what is incorrect about the spelling of that word.

The conventional dictionary definition of “therebetween” is “in the space between” and can be found, for example, in Webster’s Third New International Dictionary, published by G.C. Merriam Co., Springfield, MA, USA (1971).

Reconsideration and withdrawal of these claim objections are respectfully requested.

**Rejections under 35 U.S.C. § 103**

Claims 1 and 3 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. patent Application Publication US 24004/0023652 to Shah in view of U.S. Patent Application Publication US 2007/0243821. This rejection is respectfully traversed.

A complete discussion of the Examiner’s rejection is set forth in the Office Action, and is not being repeated here.

Because the rejection is based on 35 U.S.C. § 103, what is in issue in such a rejection is “the invention as a whole,” not just a few features of the claimed invention. Under 35 U.S.C. §103, “[a] patent may not be obtained . . . if the differences between the subject matter sought to be patented and the prior art are such that the subject matter *as a whole* would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.” The determination under § 103 is whether the claimed invention *as a whole* would have been obvious to a person of ordinary skill in the art at the time the invention was made. *See In re O’Farrell*, 853 F.2d 894, 902, 7 USPQ2d 1673, 1680 (Fed. Cir. 1988). In determining obviousness, the invention must be considered as a whole and the claims must be considered in their entirety. *See Medtronic, Inc. v. Cardiac Pacemakers, Inc.*, 721 F.2d 1563,

1567, 220 USPQ 97, 101 (Fed. Cir. 1983).

In rejecting claims under 35 U.S.C. § 103, it is incumbent on the Examiner to establish a factual basis to support the legal conclusion of obviousness. *See In re Fine*, 837 F.2d 1071, 1073, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). In doing so, the Examiner is expected to make the factual determinations set forth in *Graham v John Deere Co.*, 383 U.S. 1, 17, 148 USPQ 459, 467 (1966), and to provide a reason why one of ordinary skill in the pertinent art would have been led to modify the prior art or to combine prior art references to arrive at the claimed invention. Such reason must stem from some teaching, suggestion or implication in the prior art as a whole or knowledge generally available to one having ordinary skill in the art. *See Uniroyal Inc. v. F-Wiley Corp.*, 837 F.2d 1044, 1051, 5 USPQ2d 1434, 1438 (Fed. Cir. 1988), *cert. denied*, 488 U.S. 825 (1988); *Ashland Oil, Inc. v Delta Resins & Refactories, Inc.*, 776 F.2d 281, 293, 227 USPQ 657, 664 (Fed. Cir. 1985), *cert. denied*, 475 U.S. 1017 (1986); *ACS Hospital Systems, Inc. v Montefiore Hospital*, 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984). These showings by the Examiner are an essential part of complying with the burden of presenting a *prima facie* case of obviousness. *See In re Oetiker*, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). The mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification. *See In re Fritch*, 972 F.2d 1260, 1266, 23 USPQ2d 1780, 1783 84 (Fed. Cir. 1992). To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be suggested or taught by the prior art. *See In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1970). All words in a claim must be considered in judging the patentability of

that claim against the prior art. *See In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970).

A suggestion, teaching, or motivation to combine the prior art references is an "essential evidentiary component of an obviousness holding." *See C.R. Bard, Inc. v. M3 Sys. Inc.*, 157 F.3d 1340, 1352, 48 USPQ2d 1225, 1232 (Fed. Cir. 1998). This showing must be clear and particular, and broad conclusory statements about the teaching of multiple references, standing alone, are not "evidence." *See In re Dembiczaik*, 175 F.3d 994 at 1000, 50 USPQ2d 1614 at 1617 (Fed. Cir. 1999).

Moreover, it is well settled that the Office must provide objective evidence of the basis used in a prior art rejection. A factual inquiry whether to modify a reference must be based on objective evidence of record, not merely conclusory statements of the Examiner. *See In re Lee*, 277 F.3d 1338, 1343, 61 USPQ2d 1430, 1433 (Fed. Cir. 2002).

Furthermore, during patent examination, the PTO bears the initial burden of presenting a *prima facie* case of unpatentability. *See In re Oetiker*, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992); *In re Piasecki*, 745 F.2d 1468, 1472, 223 USPQ 785788 (Fed. Cir. 1984). If the PTO fails to meet this burden, then the Applicant is entitled to the patent. Only when a *prima facie* case is made, the burden shifts to the Applicant to come forward to rebut such a case.

The Office Action readily admits that Shah, the base reference, does not disclose (1) a multicast communication node application processing unit for setting multicast reception using at least the two kinds of wireless communication networks; (2) that the wireless server comprises a home agent application processing unit for setting a multicast transmission using at least the two

kinds of the wireless communication networks; (3) for managing signaling communication for communicating the status of the respective wireless communication terminals therebetween; (4) and for managing the registration/update processing of the respective wireless communication terminals; and (5) a terminal status table for managing the status of the respective wireless communication terminals.

In an attempt to remedy these admitted deficiencies of Shah, the Office Action turns to (1) Hundscheidt; (2) Srinivasan; and (3) Official Notice.

The Office Action concludes that it would be obvious to implement the teachings of Hundscheidt into Shah because Shah suggests seamless handover for a multi-network radio communication system with the help of GPS, and suggests multicast for a multi-network radio communication system as it is becoming standard in the Third Generation Partnership.

Applicants respectfully disagree and submit that the Office Action fails to provide objective factual evidence in support of the conclusion that one of ordinary skill in the art would be properly motivated to modify Shah in view of Hundscheidt, as suggested, for a number of reasons.

Firstly, Hundscheidt is limited to a distributed caching system and method using mobile clients to cache data content and redistribute the content to other users. Hundscheidt is simply not directed to seamless roaming, handover and session continuity between multiple network or peer-to-peer communications, as is Shah.

Secondly, Hundscheidt is limited to either the Internet Group Management Protocol (IGMP) or the Neighbor Discovery Protocol, neither of which is utilized by Shah, and does not

need to be utilized by Shah for its seamless handover feature.

Thirdly, Srinivasan's relied upon paragraphs 0036 and 037 do not discuss seamless handover between different wireless networks, and merely addresses a subscribed database and its uses.

Fourthly, the Office Action completely fails to explain why the facts that Shah has a seamless handover feature between different communication networks and Hundscheidt has a multicast feature as part of a digital rights management (DRM) content provider system, why one of ordinary skill in the art would possibly be motivated to modify the seamless handover system of Shah to incorporate a multicast feature that Shah does not need to operate or improve its seamless handover feature. Applicants respectfully submit that one of ordinary skill in the art would have no proper incentive to modify Shah, as suggested, because the added features of Hundscheidt have nothing whatsoever to do with improving Shah's seamless handover feature, and that the only possible reason to suggest this proposed combination of Shah and Hundscheidt is based solely on Applicants' disclosure and constitutes impermissible hindsight.

The Office Action continues by admitting that neither Shah nor Hundscheidt disclose a terminal configuration table for managing wireless communication network interfaces implemented in the respective wireless communication terminals.

In an attempt to remedy this deficiency, the Office Action turns to Giaffreda, which is said to disclose a terminal configuration table for managing wireless communication network interfaces implemented in the respective wireless communication terminals in an analogous radio communication technology.

The Office Action concludes that it would be obvious to implement this teaching of Giaffreda into the Shah-Hundscheidt-Srinivasan reference combination because these three references suggest seamless handover of a wireless control device over multiple networks.

Applicants respectfully disagree with this characterization of the applied references, and respectfully submit that the Office Action does not present objective factual evidence in support of a conclusion that one of ordinary skill in the art would be properly motivated to combine these references, as suggested, for a number of reasons.

Firstly, Applicants respectfully submit that the Office Action fails to make out a *prima facie* case of obviousness of the claimed invention, including a failure to disclose proper motivation to modify Shah in view of the secondary references (Hundscheidt and Srinivasan), for reasons discussed above.

Additionally, Giaffreda is not applied to remedy the aforesaid deficiencies of Shah, Hundscheidt and Srinivasan. Thus, even if, solely for sake of argument, one of ordinary skill in the art were properly motivated to modify the base reference combination in view of Giaffreda, as suggested, the so-modified reference combination would not meet, suggest, or otherwise render obvious the claimed invention.

Accordingly, the Office Action fails to make out a *prima facie* case of obviousness of the invention recited in claims 1 and 3.

Reconsideration and withdrawal of this rejection of claims 1 and 3 are respectfully requested.

Claims 2 and 4 stand rejected under 37 CFR §103(a) as being unpatentable over Shah in view of Hundscheidt and Giaffreda, as applied in the rejection of claims 1 and 3, and further in view of U.S. Patent 6,240,360 to Phelan, and U.S. Patent 6,327,533 to Chou. This rejection is respectfully traversed.

Initially, Applicants note that the Office Action fails to make out a *prima facie* case of obviousness of the invention recited in claim 1, from which claim 2 directly depends and from which claim 4 indirectly depends. Moreover, neither Phelan nor Chou are applied to remedy the aforesaid deficiencies of the reference combination used to reject claim 1. So, even if, solely for sake of argument, one of ordinary skill in the art were properly motivated to modify the base reference combination in view of Phelan and Chou, as suggested, the so-modified version of the base reference combination would not disclose, suggest, or otherwise render obvious the claimed invention.

Accordingly, the Office Action fails to make out a *prima facie* case of obviousness of the invention recited in claims 2 and 4.

Reconsideration and withdrawal of this rejection to claims 2 and 4 are respectfully requested.

#### Claims 5 and 6

Claims 5 and 6 are added for the Examiner's consideration. Applicants respectfully submit that the combination of features set forth in independent claims 5 and 6 are not disclosed or made obvious by the prior art of record.

Claims 5 and 6 each recites the subject matter of claim 1, plus additional subject matter, support for which is found throughout this Application as originally filed, including paragraphs [0048] - [0084] of the publication of the application by the U.S.P.T.O.

The present invention uses a basic access network for executing signaling communication by which communication is controlled so as to be continuously switched even when a communication terminal is out of a service area by changing to another wireless access network.

The present invention defined by claim 5 has essential features that a wireless communications system enabling to connect to a basic access network for executing signaling communication by which communication is controlled so as to be continuously switched and a wireless access network for executing data communications other than the signaling communication, which comprises wireless communication terminals including a basic access network client processing unit, a position obtaining means, and a wireless communication server including a basic access network server processing unit and a terminal status table, wherein the basic access network client processing unit and the basic access network server processing unit execute communication according to the signaling communication; the seamless application processing unit and wireless access networks execute communication through the multicast communication node application processing unit; the basic access network client processing unit obtains position information from the position obtaining means and notifies the basic access network server processing unit of the position information; the basic access network server processing unit registers the position information to the terminal status table; and any one of the wireless access network is switched to another wireless access network based on the terminal

status table, while maintaining connection of the basic access network.

As shown in Fig. 2 by the present invention, a terminal executes connection of a basic access network (BAN) by using signaling communication through the processing unit (11) at starting up. After communication to a communication opponent starts, a wireless access network (RAN) is connected to execute other data communication in Mobile IP. The terminal monitors the communication status of a communication device used as RAN using position obtaining means such as GPS, and to switch the device automatically and continuously when abnormal communication is detected. See, for example, paragraphs [0048] - [0049] of the publication of this application by the U.S.P.T.O.

A method for monitoring the position of a communication device and for switching the devices is disclosed in paragraphs [0057] - [0084] of the publication of this Application by the U.S.P.T.O. Please note that the terminal is always connected to BAN to prevent from disconnection of communication.

Regarding position information, the BAS client processing unit (12) requests a GPS receiver (17) to obtain position information and obtains the position information of latitude and longitude. Thereafter, it registers this information to the BAS server (22) as initial information through the basic access network. This information is periodically obtained in such a manner that the BAS client processing unit (12) requests the seamless application processing unit (11) and the GPS receiver (17) to obtain status information and position information at the status notification cycle, and the information on the BAS server (22) is updated thereby. This is the status notification function. See, for example, paragraphs [0085] - [0089] of the publication of this

application by the U.S.P.T.O.

In the present invention of claim 6, the BAS client processing unit in the terminal obtains position information from the position obtaining means and notifies the BAS server processing unit of the position information, and the BAS server processing unit registers the position information to the terminal status table.

According to the present invention, because the system can be switched to the basic access network and to a next candidate wireless communication network before a terminal enters an out of service area by obtaining the position of the terminal, the present invention contributes to continuous switching of networks. See, for example, paragraph [0124] of the publication of this Application by the U.S.P.T.O.

Applicants respectfully submit that this combination of features is neither disclosed nor suggested by the applied art, and respectfully request allowance of claims 5 and 6.

### CONCLUSION

All of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding rejections and that they be withdrawn. It is believed that a full and complete response has been made to the outstanding Office Action, and as such, the present application is in condition for allowance.

Application No.: 10/579,733  
Reply to Office Action dated March 17, 2009

Attorney Docket No. 4035-0180PUS1  
Art Unit 2416  
Page 24

If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone Robert J. Webster, Registration No. 46, 472, at (703) 205-8000, in the Washington, D.C. area.

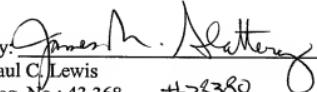
Prompt and favorable consideration of this Amendment is respectfully requested.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Date: June 17, 2009

Respectfully submitted,

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PCL/RJW:jmc

Attachment: Replacement Drawing Sheet (Fig. 2)